WEST

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Search Results -

Term	Documents
(7 NOT 5).USPT,PGPB,JPAB,EPAB,DWPI,TDBD.	18
(L7 NOT L5).USPT,PGPB,JPAB,EPAB,DWPI,TDBD.	18

Database: US Patents Full Text Database; US Pre-Grant Publication Full-Text Database; JPO Abstracts Database; EPO Abstracts Database; Derwent World Patents Index; IBM Technical Disclosure Bulletins

Search: L8

Refine Search

Recall Text Clear

Search History

DATE: Monday, August 04, 2003 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
	DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=AND		
L8	L7 not L5	18	L8
L7	L6 and ((polycationic adj polymer) or polysine or polyethyleneimine or polyethlenimine or (cationic adj liposome))	19	L7
L6	L4 same (DNA or vector)	196	L6
L5	L4 same ((polycationic adj polymer) or polylysine or polyethyleneimine or polyethylenimine or (cationic adj liposome))	9	L5
L4	(macroaggregated or aggregated) same (protein or antibody or albumin or ligand or transferrin)	3824	L4
L3	L2 and (aggregated adj (protein or albumin))	0	L3
L2	Bhogal-Balbir-S$.in.	8	L2
L1	Orson-Frank-M$.in.	0	L1

Status: Path 1 of [Dialog Information Services via Mod[redacted]

Status: Initializing TCP/IP using (UseTelnetProto 1 ServiceID pto-dialog)
Trying 31060000009999...Open

DIALOG INFORMATION SERVICES
PLEASE LOGON:
 ******** HHHHHHHH SSSSSSSS?
Status: Signing onto Dialog
 ****
ENTER PASSWORD:
 ******** HHHHHHHH SSSSSSSS? ********
Welcome to DIALOG
Status: Connected

Dialog level 02.18.00D

Last logoff: 28jul03 13:47:48
Logon file001 04aug03 15:21:34
*** ANNOUNCEMENT ***
***
--File 654 - US published applications from March 15, 2001 to the present are now online. Please see HELP NEWS 654 for details.

***
--File 581 - The 2003 annual reload of Population Demographics is complete. Please see Help News581 for details.

***
***
--File 990 - NewsRoom now contains February 2003 to current records. File 992 - NewsRoom 2003 archive has been newly created and contains records from January 2003. The oldest months's records roll out of File 990 and into File 992 on the first weekend of each month. To search all 2003 records BEGIN 990, 992, or B NEWS2003, a new OneSearch category.
***
--Connect Time joins DialUnits as pricing options on Dialog. See HELP CONNECT for information.
***
***
--SourceOne patents are now delivered to your email inbox as PDF replacing TIFF delivery. See HELP SOURCE1 for more information.
***
--Important news for public and academic libraries. See HELP LIBRARY for more information.
***
--Important Notice to Freelance Authors--
See HELP FREELANCE for more information
***
NEW FILES RELEASED
***World News Connection (File 985)
***Dialog NewsRoom - 2003 Archive (File 992)
***TRADEMARKSCAN-Czech Republic (File 680)
***TRADEMARKSCAN-Hungary (File 681)
***TRADEMARKSCAN-Poland (File 682)
***
UPDATING RESUMED
***
RELOADED
***Population Demographics -(File 581)
***CLAIMS Citation (Files 220-222)

REMOVED

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                    ***

      >>> Enter BEGIN HOMEBASE for Dialog Announcements <<<
      >>>    of new databases, price changes, etc.       <<<
                    ****
KWIC is set to 50.
HILIGHT set on as '*'
* * * * See HELP NEWS 225 for information on new search prefixes
and display codes

***                                    ***


File   1:ERIC  1966-2003/Jul 23
       (c) format only 2003 The Dialog Corporation

      Set  Items  Description
      ---  -----  -----------
Cost is in DialUnits
?b 155, 159, 5, 73
       04aug03 15:21:52 User259876 Session D528.1
            $0.30    0.085 DialUnits File1
     $0.30  Estimated cost File1
     $0.07  TELNET
     $0.37  Estimated cost this search
     $0.37  Estimated total session cost   0.085 DialUnits


SYSTEM:OS  - DIALOG OneSearch
  File 155:MEDLINE(R)  1966-2003/Aug W1
        (c) format only 2003 The Dialog Corp.
*File 155: Medline has been reloaded and accession numbers have
changed.  Please see HELP NEWS 155.
  File 159:Cancerlit  1975-2002/Oct
        (c) format only 2002 Dialog Corporation
*File 159: Cancerlit ceases updating with immediate effect.
Please see HELP NEWS.
  File   5:Biosis Previews(R)  1969-2003/Jul W4
        (c) 2003 BIOSIS
  File  73:EMBASE  1974-2003/Jul W4
        (c) 2003 Elsevier Science B.V.
*File  73: Alert feature enhanced for multiple files, duplicates
removal, customized scheduling. See HELP ALERT.

      Set  Items  Description
      ---  -----  -----------
?s (macroaggregated or aggregated) (s) (protein or antibody or ligand or albumin or tra
nsferrin)
           1592  MACROAGGREGATED
          35549  AGGREGATED
        3885911  PROTEIN
        1257298  ANTIBODY
         283953  LIGAND
         269859  ALBUMIN
          62744  TRANSFERRIN
     S1   14679  (MACROAGGREGATED OR AGGREGATED) (S) (PROTEIN OR ANTIBODY
                 OR LIGAND OR ALBUMIN OR TRANSFERRIN)
?s s1 (s) ((polycationic (w) polymer) or polylysine or polyetheleneimine or polyethelen
imine)
          14679  S1
           2562  POLYCATIONIC
          90020  POLYMER
             42  POLYCATIONIC(W)POLYMER
           9641  POLYLYSINE
              3  POLYETHELENEIMINE
              1  POLYETHELENIMINE
     S2      15  S1 (S) ((POLYCATIONIC (W) POLYMER) OR POLYLYSINE OR
```

POLYETHELENEIMINE OR POLYETHELENIMINE)
?s s2 (s) (DNA or vector)
15 S2
2157107 DNA
223103 VECTOR
S3 2 S2 (S) (DNA OR VECTOR)
?rd
...completed examining records
S4 1 RD (unique items)
?t s4/3,k/all

4/3,K/1 (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

09549294 21330332 PMID: 11437332
A small, synthetic peptide for gene delivery via the serpin-enzyme complex receptor.
Patel S; Zhang X; Collins L; Fabre J W
Department of Clinical Sciences, Guy's, King's and St Thomas' School of Medicine, King's College Hospital, London, UK.
journal of gene medicine (England) May-Jun 2001, 3 (3) p271-9, ISSN 1099-498X Journal Code: 9815764
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

...serpin-enzyme complex receptor (SECR) has previously been successfully targeted for gene delivery using synthetic peptide ligands covalently linked in fluid phase to commercially available *polylysine* preparations (approximately 10-54kDa). The objective of the present study was to improve this approach by the use of small, bifunctional, and easily standardised synthetic peptides. METHODS: Two synthetic peptides designated *polylysine* antitrypsin 1 (PAT1) (K16 FNKPFVFLI) and PAT2 (K16 CSIPPEVKFNKPFVFLI) were evaluated for gene delivery to the HUH7 human hepatocyte cell line. The K16 moiety binds *DNA* electrostatically, while the FVFLM motif of human alpha1-antitrypsin targets the SECR. RESULTS: Both PAT1 and PAT2 bind to and condense *DNA* into small particles as shown by laser scattering techniques. However, only PAT2 is effective for gene delivery, presumably on account of the greater distance between the K16 chain and the FVFLM motif. Gene delivery by PAT2/*DNA* complexes is chloroquine-dependent, can be blocked completely by free *ligand* (CSIPPEVKFNKPFVFLI), and is highly efficient (e.g. approximately five-fold more effective than lipofectamine). At physiological salt concentrations, PAT2/*DNA* complexes formed at 4 microg/ml *DNA* are approximately 350 nm in diameter and highly effective for gene transfer, but at 100 microg/ml *DNA* the complexes are *aggregated* (diameter > 4 microm) and inactive. CONCLUSIONS: A small (33 amino acid), bifunctional, synthetic peptide represents a highly efficient and readily standardised *DNA* *vector* for the SECR. The effectiveness of this peptide depends on the distance of the K16 moiety from the targeting *ligand*. High salt concentrations are not required to form effective *vector*/*DNA* complexes.
?ds

Set	Items	Description
S1	14679	(MACROAGGREGATED OR AGGREGATED) (S) (PROTEIN OR ANTIBODY OR LIGAND OR ALBUMIN OR TRANSFERRIN)
S2	15	S1 (S) ((POLYCATIONIC (W) POLYMER) OR POLYLYSINE OR POLYETHELENEIMINE OR POLYETHELENIMINE)
S3	2	S2 (S) (DNA OR VECTOR)
S4	1	RD (unique items)

?rd s2
...completed examining records
S5 9 RD S2 (unique items)
?t s5/3,k/all

5/3,K/1 (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

09549294 21330332 PMID: 11437332

A small, synthetic peptide for gene delivery via the serpin-enzyme complex receptor.

Patel S; Zhang X; Collins L; Fabre J W
Department of Clinical Sciences, Guy's, King's and St Thomas' School of Medicine, King's College Hospital, London, UK.

journal of gene medicine (England) May-Jun 2001, 3 (3) p271-9, ISSN 1099-498X Journal Code: 9815764
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

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... greater distance between the K16 chain and the FVFLM motif. Gene delivery by PAT2/DNA complexes is chloroquine-dependent, can be blocked completely by free *ligand* (CSIPPEVKFNKPFVFLI), and is highly efficient (e.g. approximately five-fold more effective than lipofectamine). At physiological salt concentrations, PAT2/DNA complexes formed at 4 microg/ml DNA are approximately 350 nm in diameter and highly effective for gene transfer, but at 100 microg/ml DNA the complexes are *aggregated* (diameter > 4 microm) and inactive. CONCLUSIONS: A small (33 amino acid), bifunctional, synthetic peptide represents a highly efficient and readily standardised DNA vector for the SECR. The effectiveness of this peptide depends on the distance of the K16 moiety from the targeting *ligand*. High salt concentrations are not required to form effective vector/DNA complexes.

5/3,K/2 (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

07395938 92259182 PMID: 1582816

Magnetic resonance imaging detection of an experimental pulmonary perfusion deficit using a macromolecular contrast agent. Polylysine-gadolinium-DTPA40.

Berthezene Y; Vexler V; Price D C; Wisner-Dupon J; Moseley M E; Aicher K P; Brasch R C
Contrast Media Laboratory, Department of Radiology, University of California, San Francisco 94143-0628.

Investigative radiology (UNITED STATES) May 1992, 27 (5) p346-51, ISSN 0020-9996 Journal Code: 0045377
Contract/Grant No.: CA 49786; CA; NCI
Erratum in Invest Radiol 1992 Aug;27(8) 582
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

RATIONALE AND OBJECTIVES. This study was designed to evaluate the potential of a blood-pool magnetic resonance (MR) contrast agent, *polylysine*-gadolinium-DTPA40 (*polylysine* -Gd-DTPA40) for detecting pulmonary perfusion defects. MATERIALS AND METHODS. Pulmonary emboli were

induced in 10 rats by [redacted]nous injection of 0.2 mL of ai[redacted]xial spin-echo images were acquired (TR = 800 mseconds; TE = 6 mseconds) before and after air injection and serially after the administration of *polylysine* -Gd-DTPA40. The embolism model was confirmed by scintigraphy using 99mTc-*macroaggregated* *albumin*. RESULTS. Signal intensity differences between normal and embolized lungs before and after the air injection were less than 25%. After *polylysine*-Gd-DTPA40 administration, signal intensity of the perfused lung increased more than 200%, whereas the embolized lung increased by only 25%. Signal intensities of the...

5/3,K/3 (Item 3 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

05620699 87300129 PMID: 3620698
Thromboxane A2 causes feedback amplification involving extensive thromboxane A2 formation on close contact of human platelets in media with a low concentration of ionized calcium.
Packham M A; Kinlough-Rathbone R L; Mustard J F
Blood (UNITED STATES) Sep 1987, 70 (3) p647-51, ISSN 0006-4971 Journal Code: 7603509
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

...to produce these responses. Platelets were washed and resuspended in a modified Tyrode solution to which no calcium salt was added that contained 0.35% *albumin* and apyrase. This medium contains 20 mumol/L Ca2+ and 1 mmol/L Mg2+. Platelets were *aggregated* with adenosine diphosphate (ADP) in the presence of fibrinogen, agglutinated with *polylysine*, or after pretreatment with chymotrypsin, *aggregated* with fibrinogen. In the low-Ca2+ medium, all these agonists caused platelets to adhere to each other, followed by secondary aggregation with TXA2 formation and...

5/3,K/4 (Item 4 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

04816885 85123203 PMID: 2982440
Effects on the buoyant density of rabbit platelets of ADP and agents that increase the concentration of cyclic AMP.
Packham M A; Perry D W; Kinlough-Rathbone R L; Rand M L; Guccione M A; Evans R M; Mustard J F
Blood (UNITED STATES) Mar 1985, 65 (3) p564-70, ISSN 0006-4971 Journal Code: 7603509
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

Rabbit platelets were *aggregated* by adenosine diphosphate (ADP), allowed to deaggregate and then separated into density subpopulations by centrifugation through discontinuous Stractan density gradients. Although ADP causes little or...

... stimulated with ADP increased initially, but returned to control values during a one-hour period. A similar decrease in platelet density was observed with an *albumin* density gradient. Under conditions in which aggregation did not occur in response to ADP with ethylenediaminetetraacetic acid (EDTA) in the medium, little or no decrease in platelet density was observed. Agglutination with *polylysine* did not change platelet density. Thus, not only agents such as thrombin and plasmin that cause the release of the contents of the platelet granules...

5/3,K/5 (Item 5 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

03621720 82032351 PMID: 6169799
Interactions between polymerized human albumin, hepatitis B surface antigen, and complement: I. Binding of polyalbumin to Clq.
Milich D R; Papas E D; Bhatnagar P K; Vyas G N
Journal of medical virology (UNITED STATES) 1981, 7 (3) p181-92, ISSN 0146-6615 Journal Code: 7705876
Contract/Grant No.: P-50-AM-18520; AM; NIADDK; R01-AI-15781-01; AI; NIAID
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

... considerable evidence that substances other than immunoglobulins can bind human Clq. Utilizing purified human Clq immobilized on polystyrene beads, we have demonstrated that polymerized human *albumin* (PHALB-125I) binds to human Clq in a direct binding assay. This interaction required a high degree of *albumin* polymerization as the percentage of binding was proportional to the polymer size and monomeric *albumin* was unreactive. Binding was species specific in the human Clq bound only human, and not xenogeneic, polyalbumins. Similarly, polymers of various other human plasma proteins...
... To demonstrate that this interaction was not unique to immobilized Clq, soluble Clq was shown to inhibit PHALB-125I binding to solid phase Clq. Because *aggregated* IgG, poly(I):poly(C), dextran sulfate, polyglutamic acid, and *polylysine* have been previously shown to bind Clq, we used them in further blocking experiments and found them also to inhibit the interaction between Clq and...

... temperature dependent. In addition, human Clq was not observed to bind hepatitis B surface antigen (HBsAg) directly; however, in the presence of sufficiently polymerized human *albumin* a Clq-PHALB-HBsAg complex was formed. These interactions may be implicated in hepatocyte-HBsAg receptor function as well as in the host defense mechanisms...

5/3,K/6 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

03528988 BIOSIS NO.: 000073032068
INTERACTIONS BETWEEN POLYMERIZED HUMAN ALBUMIN HEPATITIS B SURFACE ANTIGEN AND COMPLEMENT 1. BINDING OF POLY ALBUMIN TO COMPLEMENT C-1Q
AUTHOR: MILICH D R; PAPAS E D; BHATNAGAR P K; VYAS G N
AUTHOR ADDRESS: DEP. OF LABORATORY MEDICINE, M-523, UNIV. OF CALIFORNIA, SCHOOL OF MEDICINE, SAN FRANCISCO, CALIF. 94143.
JOURNAL: J MED VIROL 7 (3). 1981. 181-192. 1981
FULL JOURNAL NAME: Journal of Medical Virology
CODEN: JMVID
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

ABSTRACT: Substances other than Ig apparently can bind human Clq [q fragment of complement component 1]. Utilizing purified human Clq immobilized on polystyrene beads, polymerized human *albumin* (PHALB-125I) bound to human Clq in a direct binding assay. This interaction required a high degree of *albumin* polymerization as the percentage of binding was proportional to the polymer size and monomeric *albumin* was unreactive. Binding was species specific in that human Clq bound only human and not xenogeneic polyalbumins. Polymers of various other human plasma proteins were unreactive. This interaction was not unique to immobilized Clq because soluble Clq inhibited PHALB-125I binding to solid phase Clq. Because *aggregated* IgG, poly(I):poly(C),

dextran sulfate, polyg[redacted]amic acid and *polylysine* wer[redacted]nown to bind C1q, the substances were used in further blocking experiments and were found to inhibit the interaction between C1q and PHALB. Anti...

...was pH, ionic strength and temperature dependent. Human C1q did not bind hepatitis B surface antigen (HBsAg) directly; in the presence of sufficiently polymerized human *albumin*, a C1q-PHALB-HBsAg complex was formed. These interactions may be implicated in hepatocyte-HBsAg receptor function and in the host defense mechanism involved in...

5/3,K/7 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE

05044262 EMBASE No: 1992184478
Magnetic resonance imaging detection of an experimental pulmonary perfusion deficit using a macromolecular contrast agent: Polylysine-gadolinium-DTPAinf 4inf 0
Berthezene Y.; Vexler V.; Price D.C.; Wisner-Dupon J.; Moseley M.E.; Aicher K.P.; Brasch R.C.
Contrast Media Laboratory, Department of Radiology, University of California, 513 Parnassus Ave.,San Francisco, CA 94143-0628 United States
Investigative Radiology (INVEST. RADIOL.) (United States) 1992, 27/5 (346-351)
CODEN: INVRA ISSN: 0020-9996
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

RATIONALE AND OBJECTIVES. This study was designed to evaluate the potential of a blood-pool magnetic resonance (MR) contrast agent, *polylysine*- gadolinium-DTPAinf 4inf 0 (*polylysine*-Gd-DTPAinf 4inf 0) for detecting pulmonary perfusion defects. MATERIALS AND METHODS. Pulmonary emboli were induced in 10 rats by venous injection of 0.2...
...of air. Axial spin-echo images were acquired (TR = 800 mseconds; TE = 6 mseconds) before and after air injection and serially after the administration of *polylysine*-Gd-DTPAinf 4inf 0. The embolism model was confirmed by scintigraphy using sup 9sup 9sup mTc-*macroaggregated* *albumin*. RESULTS. Signal intensity differences between normal and embolized lungs before and after the air injection were less than 25%. After *polylysine*-Gd- DTPAinf 4inf 0 administration, signal intensity of the perfused lung increased more than 200%, whereas the embolized lung increased by only 25%. Signal intensities...

5/3,K/8 (Item 2 from file: 73)
DIALOG(R)File 73:EMBASE

03577957 EMBASE No: 1988027393
Thromboxane Ainf 2 causes feedback amplification involving extensive thromboxane Ainf 2 formation on close contact of human platelets in media with a low concentration of ionized calcium
Packham M.A.; Kinlough-Rathbone R.L.; Mustard J.F.
Department of Biochemistry, University of Toronto, Toronto, Ont. M5S 1A8 Canada
Blood (BLOOD) (United States) 1987, 70/3 (647-651)
CODEN: BLOOA ISSN: 0006-4971
DOCUMENT TYPE: Journal
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

...to produce these responses. Platelets were washed and resuspended in a modified Tyrode solution to which no calcium salt was added that contained 0.35% *albumin* and apyrase. This medium contains 20 mumol/L Casup 2sup + and 1 mmol/L Mgsup 2sup +. Platelets were *aggregated* with adenosine diphosphate (ADP) in the presence of fibrinogen, agglutinated with

polylysine, or after p[redacted]reatment with chymotrypsin, *ag[redacted]egated* with fibrinogen. In the low-Casup 2sup + medium, all these agonists caused platelets to adhere to each other, followed by secondary aggregation with TXAinf 2...

5/3,K/9 (Item 3 from file: 73)
DIALOG(R)File 73:EMBASE

01845269 EMBASE No: 1981216426
Interactions between polymerized human albumin, hepatitis B surface antigen, and complement. I. Binding of polyalbumin to C1q
Milich D.R.; Papas E.D.; Bhatnagar P.K.; Vyas G.N.
Dept. Lab. Med., Univ. California Sch. Med., San Francisco, CA 94143
United States
Journal of Medical Virology (J. MED. VIROL.) (United States) 1981, 7/3 (181-192)
CODEN: JMVID
DOCUMENT TYPE: Journal
LANGUAGE: ENGLISH

...evidence that substances other than immunoglobulins can bind human C1q. Utilizing purified human C1q immobilized on polystyrene beads, the authors have demonstrated that polymerized human *albumin* (PHALB-sup 1sup 2sup 5I) binds to human C1q in a direct binding assay. This interaction required a high degree of *albumin* polymerization as the percentage of binding was proportional to the polymer size and monomeric *albumin* was unreactive. Binding was species specific in that human C1q bound only human, and not xenogeneic, polyalbumins. Similarly, polymers of various other human plasma proteins...
...this interaction was not unique to immobilized C1q, soluble C1q was shown to inhibit PHALB-sup 1sup 2sup 5I binding to solid phase C1q. Because *aggregated* IgG, poly(I):poly(C), dextran sulfate, polyglutamic acid, and *polylysine* have been previously shown to bind C1q, the authors used them in further blocking experiments and found them also to inhibit the interaction between C1q...

...temperature dependent. In addition, human C1q was not observed to bind hepatitis B surface antigen (HBsAg) directly; however, in the presence of sufficiently polymerized human *albumin* a C1q-PHALB-HBsAg complex was formed. These interactions may be implicated in hepatocyte-HBsAg receptor function as well as in the host defense mechanisms...
?ds

Set	Items	Description
S1	14679	(MACROAGGREGATED OR AGGREGATED) (S) (PROTEIN OR ANTIBODY OR LIGAND OR ALBUMIN OR TRANSFERRIN)
S2	15	S1 (S) ((POLYCATIONIC (W) POLYMER) OR POLYLYSINE OR POLYETHELENEIMINE OR POLYETHELENIMINE)
S3	2	S2 (S) (DNA OR VECTOR)
S4	1	RD (unique items)
S5	9	RD S2 (unique items)

?s s1 (s) (DNA or vector or (genetic (w) immunization))

	14679	S1
	2157107	DNA
	223103	VECTOR
	1414536	GENETIC
	193741	IMMUNIZATION
	873	GENETIC(W)IMMUNIZATION
S6	604	S1 (S) (DNA OR VECTOR OR (GENETIC (W) IMMUNIZATION))

?s s6 and ((polycationic (w) polymer) or polylysine or polyetheleneimine or polyethelenimine)

	604	S6
	2562	POLYCATIONIC
	90020	POLYMER
	42	POLYCATIONIC(W)POLYMER

9641 POLYLYSINE
3 POLYETHELENEIMINE
1 POLYETHELENIMINE
S7 5 S6 AND ((POLYCATIONIC (W) POLYMER) OR POLYLYSINE OR POLYETHELENEIMINE OR POLYETHELENIMINE)
?rd
...completed examining records
S8 2 RD (unique items)
?t s8/3,k/all

8/3,K/1 (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

09549294 21330332 PMID: 11437332
A small, synthetic peptide for gene delivery via the serpin-enzyme complex receptor.
Patel S; Zhang X; Collins L; Fabre J W
Department of Clinical Sciences, Guy's, King's and St Thomas' School of Medicine, King's College Hospital, London, UK.
journal of gene medicine (England) May-Jun 2001, 3 (3) p271-9, ISSN 1099-498X Journal Code: 9815764
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

...serpin-enzyme complex receptor (SECR) has previously been successfully targeted for gene delivery using synthetic peptide ligands covalently linked in fluid phase to commercially available *polylysine* preparations (approximately 10-54kDa). The objective of the present study was to improve this approach by the use of small, bifunctional, and easily standardised synthetic peptides. METHODS: Two synthetic peptides designated *polylysine* antitrypsin 1 (PAT1) (K16 FNKPFVFLI) and PAT2 (K16 CSIPPEVKFNKPFVFLI) were evaluated for gene delivery to the HUH7 human hepatocyte cell line. The K16 moiety binds *DNA* electrostatically, while the FVFLM motif of human alpha1-antitrypsin targets the SECR. RESULTS: Both PAT1 and PAT2 bind to and condense *DNA* into small particles as shown by laser scattering techniques. However, only PAT2 is effective for gene delivery, presumably on account of the greater distance between the K16 chain and the FVFLM motif. Gene delivery by PAT2/*DNA* complexes is chloroquine-dependent, can be blocked completely by free *ligand* (CSIPPEVKFNKPFVFLI), and is highly efficient (e.g. approximately five-fold more effective than lipofectamine). At physiological salt concentrations, PAT2/*DNA* complexes formed at 4 microg/ml *DNA* are approximately 350 nm in diameter and highly effective for gene transfer, but at 100 microg/ml *DNA* the complexes are *aggregated* (diameter > 4 microm) and inactive. CONCLUSIONS: A small (33 amino acid), bifunctional, synthetic peptide represents a highly efficient and readily standardised *DNA* *vector* for the SECR. The effectiveness of this peptide depends on the distance of the K16 moiety from the targeting *ligand*. High salt concentrations are not required to form effective *vector*/*DNA* complexes.
; Carcinoma, Hepatocellular; Factor IX--genetics--GE; Lac Operon; Ligands ; Luciferase--genetics--GE; Luciferase--metabolism--ME; Peptide Fragments --chemical synthesis--CS; Peptide Fragments--genetics--GE; *Polylysine* --genetics--GE; Receptors, Cell Surface--genetics--GE; Transfection; Tumor Cells, Cultured; beta-Galactosidase--genetics--GE; beta-Galactosidase --metabolism--ME
Chemical Name: Ligands; Peptide Fragments; Receptors, Cell Surface; serpin-enzyme complex receptor; *Polylysine*; Factor IX; Luciferase; beta-Galactosidase

8/3,K/2 (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

08129910 94195779 PM[redacted] 8146151

Utilization of modified surfactant-associated protein B for delivery of DNA to airway cells in culture.

Baatz J E; Bruno M D; Ciraolo P J; Glasser S W; Stripp B R; Smyth K L; Korfhagen T R

Department of Pediatrics, Medical University of South Carolina, Charleston 29425-3313.

Proceedings of the National Academy of Sciences of the United States of America (UNITED STATES) Mar 29 1994, 91 (7) p2547-51, ISSN 0027-8424
Journal Code: 7505876
Contract/Grant No.: 45961; PHS
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

... lines the airway epithelium and creates a potential barrier to successful transfection of the epithelium in vivo. Based on the functional properties of pulmonary surfactant *protein* B (SP-B) and the fact that this *protein* is neither toxic nor immunogenic in the airway, we hypothesized that SP-B could be modified to deliver *DNA* to airway cells. We have modified native bovine SP-B by the covalent linkage of poly(lysine) (average molecular mass of 3.3 or 10...

... in culture with the test plasmid pCPA-RSV followed by measurement of activity of the reporter gene encoding chloramphenicol acetyltransferase (CAT). Transfections were performed with *DNA*.*protein* complexes using poly(lysine)10kDa-SP-B ([Lys]10kDa-SP-B) or poly(lysine)3.3kDa-SP-B ([Lys]3.3kDa-SP-B), and results were compared with transfections using unmodified poly(lysine).*DNA*, unmodified SP-B.*DNA*, or *DNA* only. For [Lys]10kDa-SP-B.pCPA-RSV preparations, CAT activity was readily detectable above the background of [Lys]3.3kDa-SP-B or unmodified SP-B. The SP-B-poly(lysine) conjugates were effective over a broad range of *protein* -to-*DNA* molar ratios, although they were optimal at approximately 500:1-1000:1. Transfection efficiency varied with the tested cell line but was not specific to...

... spectrometry (FTIR). Results of FTIR indicated that the conformation of [Lys]10kDa-SP-B was comprised primarily of alpha-helical structure compared with a predominantly *aggregated* structure of unmodified poly(lysine). We conclude that poly(lysine) conjugates of SP-B effectively deliver *DNA* in vitro and may have utility as *DNA* delivery vehicles to the airway in vivo.

Descriptors: DNA, Recombinant--pharmacology--PD; *Drug Carriers --pharmacology--PD; **Polylysine*--pharmacology--PD; *Proteolipids --pharmacology--PD; *Pulmonary Surfactants--pharmacology--PD; *Transfection --methods--MT

Chemical Name: DNA, Recombinant; Drug Carriers; Phosphatidylethanolamines ; Proteolipids; Pulmonary Surfactants; *Polylysine*; 1,2-dielaidoylphosphat idylethanolamine; Chloramphenicol O-Acetyltransferase

?ds

Set	Items	Description
S1	14679	(MACROAGGREGATED OR AGGREGATED) (S) (PROTEIN OR ANTIBODY OR LIGAND OR ALBUMIN OR TRANSFERRIN)
S2	15	S1 (S) ((POLYCATIONIC (W) POLYMER) OR POLYLYSINE OR POLYETHELENEIMINE OR POLYETHELENIMINE)
S3	2	S2 (S) (DNA OR VECTOR)
S4	1	RD (unique items)
S5	9	RD S2 (unique items)
S6	604	S1 (S) (DNA OR VECTOR OR (GENETIC (W) IMMUNIZATION))
S7	5	S6 AND ((POLYCATIONIC (W) POLYMER) OR POLYLYSINE OR POLYETHELENEIMINE OR POLYETHELENIMINE)
S8	2	RD (unique items)

?s s1 (s) (plamids and conjugates)

14679 S1

62 PLAMIDS

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          51983  CONJUG[redacted]S
      S9      0  S1 (S) (PLAMIDS AND CONJUGATES)
?ds

Set     Items   Description
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              LIGAND OR ALBUMIN OR TRANSFERRIN)
S2         15   S1 (S) ((POLYCATIONIC (W) POLYMER) OR POLYLYSINE OR POLYET-
             HELENEIMINE OR POLYETHELENIMINE)
S3          2   S2 (S) (DNA OR VECTOR)
S4          1   RD (unique items)
S5          9   RD S2 (unique items)
S6        604   S1 (S) (DNA OR VECTOR OR (GENETIC (W) IMMUNIZATION))
S7          5   S6 AND ((POLYCATIONIC (W) POLYMER) OR POLYLYSINE OR POLYET-
             HELENEIMINE OR POLYETHELENIMINE)
S8          2   RD (unique items)
S9          0   S1 (S) (PLAMIDS AND CONJUGATES)
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            $1.68  8 Types
     $3.89  Estimated cost File155
            $0.79    0.267 DialUnits File159
     $0.79  Estimated cost File159
            $3.36    0.600 DialUnits File5
               $1.75  1 Type(s) in Format  3
            $1.75  1 Types
     $5.11  Estimated cost File5
            $5.16    0.557 DialUnits File73
               $7.65  3 Type(s) in Format  3
            $7.65  3 Types
    $12.81  Estimated cost File73
            OneSearch, 4 files,  2.115 DialUnits FileOS
     $4.20  TELNET
    $26.80  Estimated cost this search
    $27.17  Estimated total session cost   2.200 DialUnits


### Status: Signed Off. (19 minutes)
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